6.8 Yolo County

6.8.1 Introduction and Summary

The following summarizes the local setting, current and future land and water use, and primary recommendations in Yolo County. A list of local water management issues and strategies identified as part of the Yolo County IRWMP is provided at the end of this section. As part of the completion of the Yolo County IRWMP, Yolo County officials are in the process of identifying the most important and/or highest priority water and land use related issues.

6.8.1.1 Local Setting

Yolo County is located in the southwest portion of the Sacramento Valley. The western portion of the county includes the foothills of the Coast Range with elevations more than 1,000 feet above msl. The majority of the county is located on the valley floor with elevations typically less than 100 feet above msl.

The primary hydrologic features of the county include the Sacramento River, Tehama Colusa Canal, Cache Creek, Putah Creek, Willow Creek, the Colusa Basin Drain, and the Yolo Bypass. Cache and Putah Creeks drain the foothill portions of the Coast Range and flow east across the valley floor. Willow Creek drains the valley floor area between Cache and Putah Creeks. The eastern boundary of Yolo County is the Sacramento River, which drains the Sacramento Valley before entering the Sacramento-San Joaquin Delta. The Colusa Basin Drain is a manmade channel designed to convey irrigation drainage from the west side of the Sacramento Valley to the Sacramento River. The Yolo Bypass is part of the Sacramento River Flood Control Project and provides flood protection for the City of Sacramento.

The IRWMP for Yolo County has identified six groundwater subbasins in Yolo County (Capay Valley, Buckeye Creek, Dunnigan Hills, West Yolo, East Yolo, and Sacramento River), which are part of the larger Sacramento Valley Groundwater Basin.

Water agencies and private parties have been effective over the years in obtaining and developing water supplies to meet the needs of Yolo County. In the past, most efforts were conducted by individual agencies. Over 20 agencies have land and water management responsibilities in the county. These include the following agricultural water purveyors, urban water purveyors, agencies with flood management responsibilities, and agencies with land use management responsibilities (see Figure 6.8-1):

- **Agricultural Water Purveyors**
  - Colusa Drain Mutual Water Company
  - Dunnigan Water District

  - Rumsey Water Users' Association
  - University of California Davis (Field Teaching and Research System, and Utility Water System)
  - Yolo County Flood Control and Water Conservation District
  - Deseret Farms
  - River Garden Farms

- **Urban Water Purveyors**
  - City of Davis
  - University of California Davis (Domestic System)
  - City of West Sacramento
  - City of Winters
  - City of Woodland

- **Flood Management Agencies**
  - Reclamation District 108
  - Reclamation District 150
  - Reclamation District 307
  - Reclamation District 730
  - Reclamation District 765
  - Reclamation District 827
  - Reclamation District 1600
  - Reclamation District 537
  - Reclamation District 999
  - Reclamation District 2068
  - Reclamation District 2035
  - River Garden Farms Company (Reclamation District 787)
  - Conaway Conservancy Group (Reclamation District 2035)

- **Land Use and Resource Agencies**
  - Yolo County
  - Yolo County Resource Conservation District
  - North Delta Water Agency

It is recognized that managing existing water supplies from the standpoint of quantity, quality, and environmental considerations can no longer be done individually and that a collaborative effort is essential. This collaborative effort with agencies, within this region and neighboring regions, is essential for managing existing resources and even more important to

embark on new projects to enhance the supply and reliability of the supply. The WRA was formed in 1994 to provide regional leadership in the development of water resources management for the county. The WRA is currently leading the development of the Yolo County IRWMP.

For planning purposes, the WRA has defined Yolo County as its "Planning Region." WRA member agencies will be responsible for funding and implementing programs and projects included in the Yolo County IRWMP. The region as defined by the WRA has and will continue to be an appropriate area for water management; however, the WRA recognizes that for the longer term, certain projects will, of necessity, require working relationships with agencies in neighboring regions to realize the full benefit of integrated resources management. A list of the WRA members and their management responsibilities related to water is provided in Table 6.8-1.

TABLE 6.8-1
WRA Members and Water Management Responsibilities

WRA Members	Management Responsibilities Related to Water
City of Davis	Operations and maintenance of municipal water and wastewater treatment facilities and storm drainage facilities.
City of West Sacramento	Operations and maintenance of municipal water and wastewater treatment facilities and short drainage facilities.
City of Winters	Operations and maintenance of municipal water and wastewater treatment facilities and storm drainage facilities.
City of Woodland	Operations and maintenance of municipal water and wastewater treatment facilities and storm drainage facilities.
University of California, Davis	Operations and maintenance of municipal and agricultural water facilities, wastewater treatment facilities, and storm drainage facilities.
Yolo County Flood Control and Water Conservation District	Operations and maintenance of water storage, agricultural water delivery systems, and agricultural and storm drainage facilities.
Dunnigan Water District	Operations and maintenance of agricultural water distribution facilities.
Reclamation District 2035	Maintenance of levees and operation and maintenance of water delivery system and agricultural and storm drainage facilities.
Yolo County	Land use and support for water and wastewater service, flood control, and drainage.

6.8.1.2 Figure Land Use Patterns

The plan area totals approximately 650,000 acres. The current general land use mix shown on Figure 6.8-2 shows the area consists primarily of agricultural lands (about 366,000 acres), with urban lands (about 30,000 acres) and undeveloped lands including native vegetation and

riparian lands (about 254,000 acres) making up the balance of the acreage. Common crops in the county include truck crops such as tomatoes, pasture such as alfalfa, and hay. The primary urban areas within Yolo County include the incorporated Cities of Davis, Woodland, Winters, West Sacramento, the University of California at Davis, and the unincorporated communities of Capay, Clarksburg, Dunnigan, Esparto, Guinda, Knights Landing, Madison, Rumsey, Yolo, and Zamora.

6.8.1.3 Water Use and Water Supply Patterns

Under current conditions, water demands total about 924,000 af/yr in average-year types, consisting of approximately 875,000 af/yr (over 90 percent of the total water demand) agricultural water demand and 49,000 af/yr urban water demand. Annual surface water supplies total almost 600,000 af/yr for agriculture and less than 10,000 af/yr for urban uses. About 275,000 ac-ft of groundwater is used annually to supplement agricultural surface water supplies. In addition, groundwater is used to meet most urban water demands in the county (39,000 ac-ft).

6.8.1.4 Existing and Ongoing Planning

The WRA is currently leading the development of the Yolo County IRWMP, which is the most comprehensive, proactive effort ever undertaken to plan for Yolo County's water future. The Yolo County IRWMP builds on previous water planning efforts such as Yolo County's first water plan in 1984 and the update in 1992. The 1992 update led to the formation of the WRA, created to facilitate implementation of the 1992 Water Plan. The long-held objective of the 1992 Water Plan is to assure an adequate water supply, both in quantity and quality, for the people of Yolo County, present and future, in a manner that is efficient, economical, and environmentally sound.

The Yolo County IRWMP builds on this long history and the significant work of member agencies, but represents a more thoughtful collaborative effort on the part of the WRA than ever undertaken or considered before. The Yolo County IRWMP will identify high-priority water issues and solutions and provide an implementation strategy for the five management areas including the following:

- Water Supply and Drought Preparedness
- Water Quality
- Flood Management and Storm Drainage
- Aquatic and Riparian Ecosystem Enhancement
- Recreation

The updated water management strategies are needed to address the changes in land use conditions anticipated between current conditions and 2025. This demonstrates the need for the regional cooperation to prepare the Yolo County IRWMP, which includes using supporting documents. Some of the relevant water resources planning documents for Yolo

County are listed in Table 6.8-2. Most of the information used to prepare this analysis is provided from the Draft Yolo County IRWMP and Background Data and Information Appendices. Additional supporting information is available from the sources listed in Table 6.8-2.

TABLE 6.8-2
Existing and Relevant Yolo County Water Resource Planning Documents

Planning Document	Description	Date Published
Yolo County Technical Studies for the Yolo County Cache Creek Resources Management Plan		1995
City of Davis/University of California Groundwater Studies, Phase I and Phase II		1995, 2005
Yolo County Flood Control and Water Conservation District Water Management Plan		2000
Yolo County Flood Control and Water Conservation District/Yolo Zamora Water District Conjunctive Use Feasibility Study		2003
Yolo County Flood Control and Water Conservation District Groundwater Monitoring Program		2004
City of Woodland Water Supply Feasibility Study		2003
City of Woodland Strom Drainage Facilities Master Plan		2005
City of Davis/University of Davis California Water Supply Feasibility Study		2002
City of Winters Moody Slough Subbasin Drainage Master Plan		2004
City of Winters Putah Creek-Dry Creek Subbasin Drainage Master Plan		2004
Yolo County IRWMP Background Data and Information Appendix	Provides information about the physical, institutional, and legal aspects of water management in Yolo County.	2005

6.8.1.5 Plan Area

The Yolo County IRWMP area includes all of Yolo County and further subdivides the plan area into the following geographic areas to provide better resolution of differences between areas and project benefits:

- Colusa Basin Drain
- City of Davis
- City of Woodland
- Sacramento River
- Cache Creek
- Willow Slough
- Yolo Bypass

Methodology

The Yolo County IRWMP relied on the Department's Bulletin 160-98 to estimate the 1995 and future (2020) water use and supply for both average and dry year types. The countywide agricultural and urban water use and water supply summary for Yolo County was developed using these data with assistance by the Department's Central District.

This section briefly summarizes the land and water use analysis presented in *Land Use, Water Use, and Water Supplies of Yolo County of the Yolo County IRWMP, Background Data and Information Appendix, Chapter 5*.

Land Use Conditions

Existing Land Use Condition (2005)

In the Yolo County IRWMP, land use conditions were evaluated using the 1997 Department land use survey data and YCFCWCD Engineer's Annual Report. The results of the land use evaluation for the county are presented in Table 6.8-3.

TABLE 6.8-3
Existing Yolo County Land Use

General Land Use Category	Acres (1997)
Yolo County – Total Acres	653,370
Agriculture	366,058
Urban	30,437
Native	238,479
Riparian Settings	6,439
Other Water Bodies	9,261
Lands Not Surveyed	2,696

According to this analysis, over half (about 56 percent) of the acreage in Yolo County is agriculture. According to Yolo County Crop Reports, wheat, barley, and other field crops have been the most abundant in the county since 1963, but it should be noted that from 1963 to 2002, tomato processing production doubled.

Approximately 5 percent of the areas within Yolo County are classified as urban. The Yolo County IRWMP does not estimate the changes in urban acreage within Yolo County between 1997 and 2005.

According to the land use survey, approximately 250,000 acres (38 percent) in Yolo County are characterized as native vegetation and riparian acreage.

Future Land Use Condition (2020)

The Yolo County IRWMP uses year 2020 as its future conditions from the Department's Bulletin 160-98.

Water Use Conditions

The water needs of the agricultural and urban lands are met with a combination of surface water and groundwater supplies. The actual water supply mix varies depending on land use type (agricultural versus urban) and accessibility to surface water. Those areas that do not have access to surface water rely entirely on groundwater to meet their water demands. It is recognized that future water use conditions will differ from the current water use because of changes in land use conditions and water supplies.

Existing Water Use Conditions (1995)

Average Year Conditions. The existing water use conditions presented in Table 6.8-4 show the water demand totals approximately 915,000 ac-ft. The agricultural water demand totals about 866,000 ac-ft, 95 percent of the overall water demand. About 70 percent of the agricultural demands are met with surface water, with the remaining demands met with groundwater.

TABLE 6.8-4
1995 – Average-year Conditions (1,000 ac-ft)

		Supply		
	Demand	**Surface Water**	**Groundwater**	**Total**
Agricultural	866	599	277	876
Urban	49	9	39	48
Total	915	608	316	924
Surplus (Deficit)				*9*

The urban areas total about 5 percent (49,000 ac-ft) of the total water demand, which are met primarily with groundwater (80 percent). Within Yolo County, only the City of West Sacramento currently uses surface water for a municipal water supply, totaling about 9,000 af/yr.

According to the countywide water balance, there is an estimated 9,000-acre-foot annual surplus for 1995 average-year conditions. Although these numbers suggest that the plan area has a water balance surplus, it might not be representative of local variations in which one area's surplus might offset another local area's deficit.

Dry Year Conditions. The 1995 dry-year water use conditions presented in Table 6.8-5 show the water demand totals approximately 1,070,000 ac-ft. The agricultural water demand totals about 1017,000 ac-ft (95 percent of the overall water demand). In dry years, only 56 percent of the agricultural demands are met with surface water, with the remaining demands met with groundwater. Groundwater use increases by 137,000 ac-ft in dry years because of increased water demand of the crops and reduced surface water supply.

TABLE 6.8-5
1995 – Dry-year Conditions (1,000 ac-ft)

		Supply		
	Demand	**Surface Water**	**Groundwater**	**Total**
Agricultural	1,017	573	414	987
Urban	53	12	41	53
Total	1,070	585	455	1,040
Surplus (Deficit)				*(30)*

In dry years, the urban areas total about 5 percent of the total water demand (53,000 ac-ft), which are met primarily with groundwater (77 percent). The increase in urban water demand in dry years is met with increases in both surface water and groundwater use.

Using the water demand and water supply conditions, it is estimated that Yolo County has a 30,000-acre-foot annual deficit within the county's agricultural water demand. Although these numbers suggest that the plan area has a water balance deficit, it might not be representative of local variations in which one area's surplus might offset another local area's deficit.

Future Water Use Conditions (2020)

Average Year Conditions. The 2020 average-year water use conditions presented in Table 6.8-6 shows the Yolo County water demand totals approximately 927,000 ac-ft. The agricultural water demand totals about 848,000 ac-ft, 91 percent of the overall water demand. About 70 percent of the agricultural demands are met with surface water, with the remaining demands met with groundwater.

TABLE 6.8-6
2020 – Normal-year Conditions (1,000 ac-ft)

		Supply		
	Demand	**Surface Water**	**Groundwater**	**Total**
Agriculture	848	600	257	857
Urban	79	15	63	78
Total	927	615	320	935
Surplus (Deficit)				*8*

The urban areas total about 5 percent of the total water demand (79,000 ac-ft), which are met primarily with groundwater (80 percent). According to existing information, only the City of West Sacramento is shown to rely on surface water for a municipal water supply in year 2020 (about 15,000 af/yr).

Year 2020 conditions reflect an overall increase in water demand (about 12,000 ac-ft) compared to 1995 conditions, due primarily to an increase in urban demand of about 30,000 ac-ft, and a smaller decrease in agricultural demand (decrease of about 18,000 ac-ft). There is a slight increase in both surface water supplies and groundwater pumping to meet the increased demand.

The countywide water balance suggests that there is an 8,000-acre-foot annual surplus in average-year conditions in 2020. Although these numbers suggest that the plan area has a water balance surplus, it might not be representative of local variations in which one area's surplus might offset another local area's deficit.

Dry Year Conditions. The 2020 dry-year water use conditions presented in Table 6.8-7 show the water demand totals approximately 1,069,000 ac-ft. The agricultural water demand totals about 983,000 ac-ft, 92 percent of the overall water demand. In dry years, only 57 percent of the agricultural demands are met with surface water, with the remaining demands met with groundwater. Groundwater use increases by 172,000 ac-ft in dry years because of increased water demand of the crops and reduced surface water supply.

TABLE 6.8-7
2020 – Drought-year Conditions (1,000 ac-ft)

		Supply		
	Demand	**Surface Water**	**Groundwater**	**Total**
Agriculture	983	559	429	988
Urban	86	12	71	83
Total	1,069	571	500	1,071
Surplus (Deficit)				*2*

The urban areas total about 8 percent of the total water demand (86,000 ac-ft), which are met primarily with groundwater (82 percent). The increase in urban water demand in dry years is met with an increase in groundwater use.

According to the countywide water balance, there is an estimated 2,000-acre-foot annual surplus for 2020 dry-year conditions. Although these numbers suggest that the plan area has a water balance surplus, it might not be representative of local variations in which one area's surplus might offset another local area's deficit.

6.8.1.6 Local Water Management Issues and Strategies

The Yolo County IRWMP is currently developing new water management strategies for Yolo County that will provide for long-term water management to address changes in land and water use conditions and water supply availability of the region. The WRA and member agencies have worked together to integrate the strategies for the local districts to develop a plan that meets the stated planning objectives. The goals and objectives for water management in Yolo County have been developed through a variety of countywide planning efforts including the *Yolo County Water Plan–1984* and the *Yolo County Water Plan Update – 1992*. In addition, the MOU that formed the WRA, the WRA bylaws, includes statements of purpose and powers that effectively are goals for water resource management in Yolo County. The following goals and objectives are synthesized from the sources by the WRA Technical Committee and serve as a starting point for the IRWMP process. The goals for the Yolo County IRWMP are as follows:

- To assure an adequate water supply – in both quantity and quality – for the people of Yolo County, present and future, in a manner that is efficient, economical, and environmentally sound.
- To protect the people of Yolo County and property from hazards associated with storm runoff and flooding.

Water Resources Planning Strategies

The water resources planning strategies currently being developed as part of the Yolo County IRWMP are framed in the following five water resource management categories:

- Water Supply and Drought Preparedness
- Water Quality
- Flood Management and Storm Drainage
- Aquatic and Riparian Ecosystem Restoration
- Recreation

The water resources planning strategies were developed using data and information developed over the last 20 years. During this process, particular findings and issues were identified that related to the respective water management categories. The findings and issues

provide a framework for the related policies to consider in the Yolo County General Plan Update. In addition, the issues provide the basis for identifying actions for consideration in the IRWMP process. The findings and issues of each of the water management categories are presented below.

Water Supply and Drought Preparedness

The findings associated with water supply and drought preparedness include the following:

- Urban areas, agriculture, and the environment in Yolo County depend on a reliable water supply, a combination of both groundwater and surface water.
- Surface water sources in Yolo County include the Sacramento River, Colusa Basin Drain, Putah Creek, Cache Creek, and the Willow Slough Bypass.
- All urban water users, except West Sacramento, rely on groundwater as their primary source of water supply. Farmers rely on groundwater for approximately 40 percent of their supply in a normal year, but rely more heavily on groundwater during drought years.
- Future urban population growth will result in an increase in water supply needs and demands from cities, unincorporated communities, and the University of California, Davis. Agricultural water demand is expected to remain fairly stable, but might decline slightly depending on the impact of land conservation and conversion.

The issues associated with water supply and drought preparedness include the following:

- Water purveyors increasingly face more stringent water quality regulations.
- There is a need to improve existing water supply quality and pursue higher quality water sources to meet current and future demands.
- Water purveyors must address the availability of adequate water supplies during severe drought conditions.
- Subsidence might occur as a result of groundwater extraction.
- The cost of providing water and wastewater service is increasing and expected to continue.
- Regulatory compliance is increasingly complex and expensive.
- The ability of deep aquifers to sustain current and future demands has not been identified.

Twenty-six potential actions focusing on water supply and drought preparedness have been identified during the IRWMP process. These are presented in the Draft Yolo County IRWMP.

Water Quality

The findings associated with water quality include the following:

- It is important to protect the quality of groundwater and surface water for the benefit of urban areas, agriculture, and the environment.
- Urban areas can significantly improve drinking water quality through treatment processes.
- Groundwater and surface water quality are both critical for ecosystem health.
- Drinking water quality and wastewater discharge standards are tightening.
- Deteriorating water quality might increasingly have an impact on agricultural production.

The issues associated with water quality include the following:

- High nitrate levels are in the drinking water wells of both cities and unincorporated communities that potentially present a risk to human health.
- High salinity levels from the wastewater treatment plant discharge into waterways that exceed permit requirements.
- There is potential for high salinity levels in groundwater if agricultural irrigation slowly concentrates salts in shallow groundwater aquifers, but more monitoring is necessary to determine if it is an issue.
- Levels of arsenic and chromium VI, naturally occurring constituents in deep groundwater aquifers, approach human health standards and might cause a risk to human health.
- There are high levels of boron in shallow groundwater aquifers that reduce crop yields or destroy young, perennial crops.
- Trace levels of flame-retardant chemicals do not yet present a risk to human health, but might present a risk in the future.
- Wellhead neglect and abandonment, creates possible conduits for pollution to enter groundwater aquifers.

- There are low levels of pesticides, nitrates, or other harmful constituents in surface water that are not known to exceed human health standards, but additional monitoring is required to ensure that the water is safe.

- Some surface water sources have high levels of suspended sediment that can negatively affect aquatic life.

- High levels of mercury in Cache Creek and the Yolo Bypass might present a risk to humans who consume large quantities of fish and fish-eating wildlife.

- Stormwater drainage might result in spikes of pollutants of concern that could exceed human health standards and negatively affect wildlife.

Fourteen potential actions focusing on water quality have been identified during the IRWMP process. These are presented in the Draft Yolo County IRWMP.

Flood Management and Storm Drainage

The findings associated with flood management and storm drainage include the following:

- Much of Yolo County is a natural floodplain.

- Three primary geographic regions have flooding issues: Cache Creek Basin/Woodland, Sacramento River corridor, and Western Yolo floodplain (Madison, Esparto, and Airport Slough).

- Regions have unique circumstances but share common issues.

- The unincorporated areas of Yolo County near Cache Creek, as well as parts of the City of Woodland, have only 10-year flood protection according to the Federal Emergency Management Agency.

- Yolo County contains 215 miles of levees that are part of the Sacramento River Flood Control Project, including the Yolo Bypass.

- Geotechnical studies are necessary to determine whether some of Yolo County's Sacramento River levees are subject to underseepage or other potential causes of levee failure.

- The Federal Emergency Management Agency released new guidelines in 2004 that will require Yolo County to submit geotechnical studies of specific Sacramento River levees to achieve 100-year flood protection certification during the Federal Emergency Management Agency's 2006 remapping process. If Yolo County does submit the geotechnical studies, the Federal Emergency Management Agency will decertify the levees.

- Yolo County, 13 reclamation districts, one levee district, one drainage district, and the Department have responsibility for maintaining Yolo County's Sacramento River Flood Control Project levees.

- During the past 10 years, there has been increasing pressure in the Central Valley to build in floodplain areas. Yolo County has restricted growth in the floodplains in the unincorporated areas, but many residential, industrial, and residential structures continue to be built in the floodplain by cities.

The issues associated with flood management and storm drainage include the following:

- Through-seepage and underseepage are threats to Sacramento River levees.

- Erosion is a threat to Sacramento River levees.

- Funding is inadequate for geotechnical studies to determine erosion and seepage threats to Sacramento River levees and projects to fix them.

- Public outreach is inadequate (need for flood insurance and understanding of evacuation plans).

- Emergency preparedness plans for levee failures are inadequate.

- Development in the floodplain needs to be evaluated (the more development, the more risk to public safety).

- Compensation to Yolo County for providing the City of Sacramento with flood protection is inadequate.

- Flood protection from existing Cache Creek levees is inadequate.

- Existing Cache Creek levees are eroding.

- Vegetation removal on Cache Creek (impedes capacity) is inadequate.

- There is an insufficient understanding of the risk of Cache Creek flooding.

- Levees to protect Madison and Esparto from Lamb Valley Slough flooding are inadequate.

- Flood protection at the airport is inadequate.

Thirty-eight potential actions focusing on flood management and storm drainage have been identified during the IRWMP process. These are presented in the Draft Yolo County IRWMP.

Aquatic and Riparian Ecosystem Restoration

The findings associated with aquatic and riparian ecosystem restoration include the following:

- Six major waterways in Yolo County that could benefit from various forms of aquatic and riparian aquatic ecosystem enhancement include the following:
  - Cache Creek
  - Putah Creek
  - Colusa Basin Drain
  - Sacramento River (including Fremont Weir)
  - Willow Slough
  - Yolo Bypass
- Tributaries to these waterways are also important to the aquatic and riparian ecosystem enhancement effort.
- Changes to the landscape from agriculture, development, and flood control projects have diminished aquatic and riparian habitat over the last 150 years.
- Recent state government efforts, including the passage of resources bonds, have made funds available for aquatic and riparian ecosystem enhancement efforts.
- Many of Yolo County's waterways are considered of statewide importance for aquatic and riparian ecosystem enhancement efforts.

The issues associated with aquatic and riparian ecosystem restoration include the following:

- Loss of native plants, increase of invasive plants leading to increased erosion problems, and loss of habitat
- Loss of native fish habitat, including spawning grounds
- Barriers to fish passage that prevent anadromous fish from reaching spawning grounds
- Barriers to fish passage that prevent juvenile fish from reaching floodplains with superior food availability and better protection from predators than open waterway
- Loss of habitat for terrestrial species, including endangered species, leading to a decline in some populations
- Increase of invasive aquatic species
- Methylmercury accumulation is fish tissue, which puts fish-eating wildlife at risk of neurological and reproductive disorders

Forty-four potential actions focusing on aquatic and riparian ecosystem enhancement have been identified during the IRWMP process. These are presented in the Draft Yolo County IRWMP.

Recreation

The findings associated with recreation include the following:

- Countywide survey of recreational preferences specific to waterways has not been conducted, although individual government entities have developed detailed plans.
- There are many opportunities to enhance existing recreational opportunities along waterways.

The issues associated with recreation include the following:

- Improve and create new educational opportunities (interpretive centers) related to waterways.
- Improve and create new hiking, bicycle, and equestrian trails along waterways.
- Improve and create new hunting and fishing access sites along waterways.
- Improve and create new camping facilities along waterways.
- Improve and create new boating opportunities (motorized and nonmotorized).
- Improve and create new wildlife-viewing opportunities.
- Improve and create new day-use activities (picnicking and swimming).

Thirty potential actions focusing on recreation have been identified during the IRWMP process. These are presented in the Draft Yolo County IRWMP.

Integrated Actions

Actions identified for consideration in the IRWMP process may consist of projects, programs, or policies to specifically address issues within the respective water resource management categories. These actions may include projects, programs, or policies that have been thoroughly investigated and/or ones that are conceptual. Nevertheless, all actions, irrespective of the level of effort to which they have been investigated, warrant equal consideration from the standpoint of defining a course of action for enhancing integrated water management within Yolo County for the next 10 to 20 years. Throughout the planning process, new actions or refinements to earlier actions are likely to be added as a result of

input from agencies and the public. These, too, will be evaluated under the same prioritization criteria.

A special category of actions that will not be prioritized are "foundational actions." These are programs or projects that are foundational to resource management. They can include monitoring and data gathering or modeling programs that are deemed essential to water resources management. Sixteen water management actions have been included as foundational actions. A complete listing of these and all of the actions is included in the Yolo County IRWMP.

Nine Integrated Actions have been identified through the IRWMP planning process. Each of these Integrated Actions is briefly described (a more complete description of the Integrated Actions, including a listing of the potential component actions, is included in the Draft Yolo County IRWMP) as follows:

- **Davis-Woodland Surface Water Supply Project** – This project seeks to assure an adequate water supply for the people of Davis, Woodland, and the university through the conjunctive management of surface water and groundwater resources to enhance the quantity, quality, and reliability of the water supply for existing and future residents and improved quality of the wastewater discharged.

- **Reclamation District 2035 Sacramento River Diversion and Conveyance Project** – This project plans to provides fisheries enhancement with a state-of-the-art fish screen and water supply reliability for agriculture and wetlands management in and adjacent to the Yolo Bypass.

- **Cache Creek Flood Management Integrated Project** – Periodic high flows in Cache Creek cause extensive bank erosion, levee degradation, and local flooding, threatening the north and northeast sections of the City of Woodland and the Town of Yolo. A well-planned series of projects and programs will ultimately provide 100-year level or greater of flood protection and levee integrity by combining the cumulative effects of several integrated projects throughout the Cache Creek river corridor.

- **Cache Creek Water Management Integrated Project** – This project provides for the conjunctive management of surface water and groundwater resources to enhance the water supply and its reliability for existing and future residents, agriculture, aquatic and riparian habitat enhancement, and recreation along Cache Creek between Capay Dam and County Road 94B.

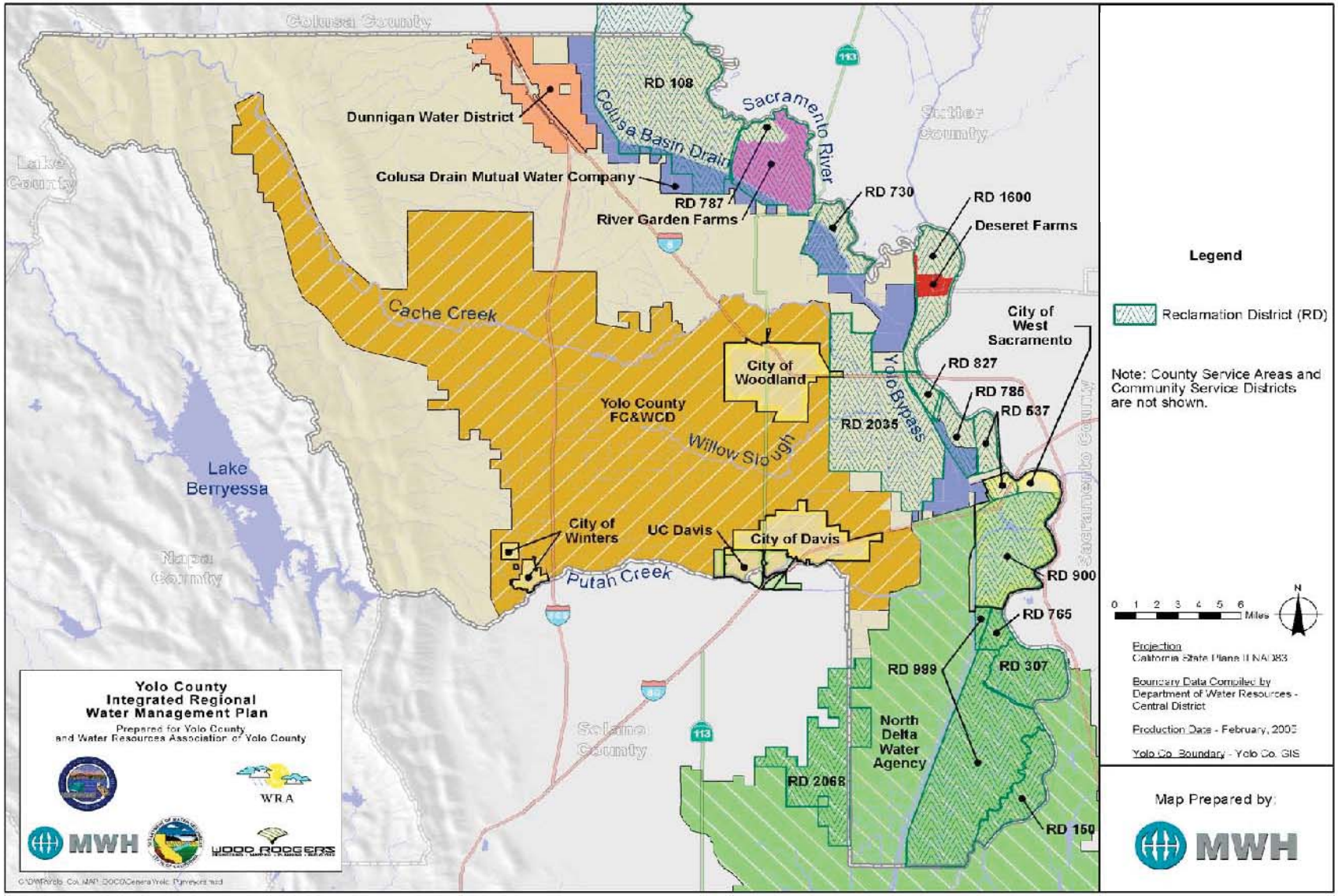
- **Dunnigan Integrated Project** – This project strives to assure existing and future residents of Dunnigan with a reliable long-term water supply and protection from hazards associated with storm runoff and flooding.

- **Putah Creek Integrated Project** – This project provides improvement of water quality, storm drainage, flood flow conveyance, habitat quality, and recreation in the Putah Creek area. In addition, water supply reliability objectives could be realized by the integrated project.

- **Yolo Bypass Integrated Project** – This project provides enhancement of the key functions of the Yolo Bypass as a flood management facility, agricultural area, waterfowl and shorebird habitat, anadromous fish nursery area, and recreation area for the region. These functions will be enhanced by building and enhancing facilities and restoring appropriate habitat that is compatible with the flood management and agricultural functions of the Yolo Bypass.

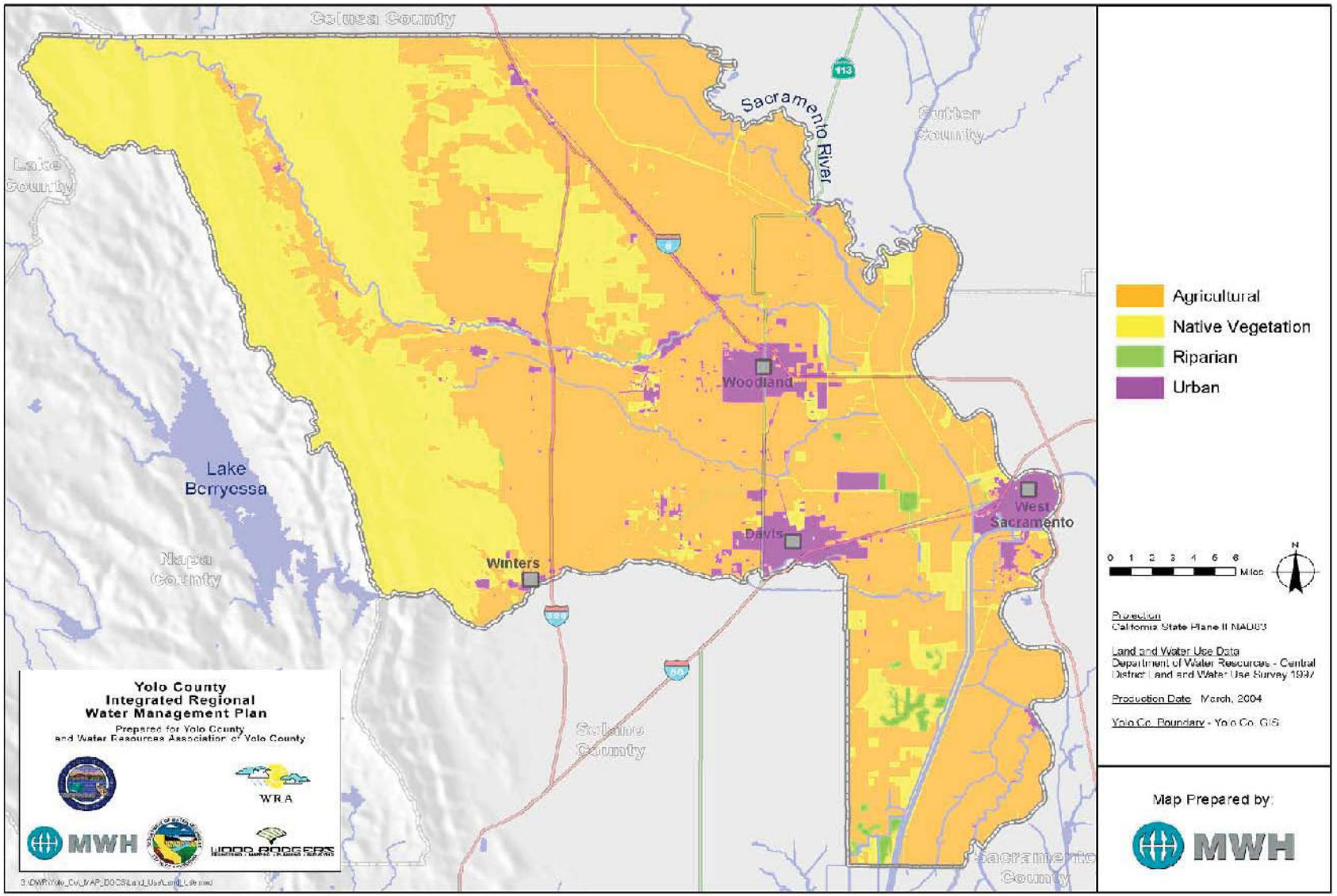
- **Sacramento River (West Bank) Integrated Project** – This project provides the conjunctive management of surface water and groundwater resources to enhance the water supply and its reliability for existing and future residents, agriculture, aquatic and riparian habitat enhancement, and recreation.

- **Yolo County Sloughs, Canals, and Creeks Management Program** – This project provides for the management of stormwater that flows through Yolo County. It can be enhanced and adverse impacts minimized through a program that integrates treatment of stormwater, water quality, and habitat improvements on Willow Slough, its tributary sloughs, and water delivery and drainage canals.



Source: Yolo County Integrated Regional Water Management Plan

FIGURE 6.8-1
WATER-RELATED ADMINISTRATIVE BODIES IN YOLO COUNTY
SACRAMENTO VALLEY IRWMP



Source: Yolo County Integrated Regional Water Management Plan

FIGURE 6.8-2
YOLO COUNTY LAND USE (1997)
SACRAMENTO VALLEY IRWMP